HAER:GA-20

Augusta Railway Co. West Power Station, 1890 15th and Greene Streets intersection Augusta Richmond County Georgia

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# PHOTOGRAPH:

WRITTEN HISTORICAL AND DESCRIPTIVE DATA

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## HISTORIC AMERICAN ENGINEERING RECORD

# AUGUSTA RAILWAY CO. WEST POWER STATION

HAER GA-20

Location:

West of 15th Street, where Greene intersects

with 15th, Augusta, Richmond County, Georgia

UTM: Quad:

Date of Construction:

ca. 1890

Present Owner:

Georgia Power Company, Atlanta, Georgia

Present Use:

Site only.

Significance:

The first generators of hydroelectric power on the Augusta Canal. The company, in addition to operating a street railway, sold electric power to domestic and industrial consumers, including Augusta Textile Mills. The final owners, the Georgia Power Co., used the site to generate hydroelectric power until c. 1970.

Historian:

Alan J. Steiner, September 1977

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## ORGANIZATION

The Augusta Railway Company received its charter on 13 November 1889. A group of investors known as the Jarvis-Conhein Syndicate controlled this company, as well as the Augusta Electric Light and Motor Company. Colonel D. B. Dyer, an ex-U. S. Indian Agent and first mayor of Guthrie, Oklahoma, was the originator and president of both enterprises. He also was in charge of the syndicate's real estate interests in the Augusta area, and no doubt planned to make a bundle when the street railway permitted the Augusta working population to creep out to the suburbs. Dyer had rolled into Augusta fresh from previous electric street railway triumphs in Kansas City. The Colonel brought with him management personnel and a number of his employees from the Midwestern city. 2 Augusta, Dyer purchased the new electric plant of the Augusta and Summerville Railway, three new and three old electric cars, and all the rails, lines and street railway franchises of the company. Dyer planned to move the Augusta and Summerville's electric plant to his company's power house. 3 On 15 June 1810, the company began operations. 4

### POWER

The Augusta Railway Co. purchased a site between the first and third level of the Augusta Canal, applied for a power grant from the City of Augusta and began construction of a powerhouse around 1890. <sup>5</sup>

In this brick 84 foot x 200 foot building, later known as the West Plant, the company operated both water and steam generating equipment. <sup>6</sup> The company obtained a total fall of 35 feet at the site. Water flowed

from the canal to three turbines via a short, nine foot penstock. The Victor horizontal turbines, manufactured by the Stilwell-Bierce Company of Dayton, Ohio, sat in two casings. One casing contained two 350 horsepower wheels on one shaft. The second casing housed a 125 horspower wheel on a second independent shaft. The water for this third turbine flowed from the first casing to the second through a small penstock. The power from the three wheels was transmitted by belts to a 150-foot long countershaft, set ten feet above the floor on brick pedestals. The company's auxiliary steam plant consisted of three 250 horsepower Babcock & Wilcox boilers and an 800 horsepower Corliss engine belted to the same countershaft. The company's generators ran off belts from this shaft. Three Edison 100 kilowatt generators and one Thomson-Houston generator of the same capacity provided the current for the street railway. The West Power Station also operated its own dynamo to run the plant's electric lights. 7

# BUSINESS HISTORY

In June 1896, the Augusta Railway Co. combined with the Augusta Light Co. and the local Thomson-Houston Co. to form the Augusta Railway and Electric Company. <sup>8</sup> The company ran cars in Augusta only until 1902, when the Augusta and Aiken Railway, an electric interurban, began operations. The Augusta Railway and Electric Company soon combined with this company under New Jersey laws and formed the Augusta and Aiken Railway and Electric Co. <sup>9</sup> In December 1928, the Georgia Power Co. purchased the company's railway and electric light properties. The electric company had little interest in managing the railway and

discontinued the interurban operation in 1929 and the city operation in 1937. The Georgia Power Co. continued to use the plant to generate both steam electric and hydroelectric power until the late nineteen-sixties or early seventies. At that time, the power company finally decided that the plant was to uneconomical to operate, compared with the cost of electricity, generated at large-scale steam and hydroelectric plants, which fed into a southeastern superpower network.

## LATER POWER EQUIPMENT

F. A. "Goat" Saxon, who began to work at the Augusta and Aiken Railway and Electric Company in 1923 and became Division Engineer, recalled that the plant at that time included 2 vertical turbins which drove two 400 kilowatt A.C. generators and one horizontal 500 kilowatt generator that supplied the railway with current. In an adjacent building, Georgia Power late installed a 2750 kilowatt steam turbine. The power company eventually removed the D. C. generator, since it no longer operated the railway, and replaced it with another A. C. generator. Georgia Power never installed any new turbines or generators, aside from replacing one D. C. generator with an A. C., following the discontinuation of railway operation. 12

Georgia Power Co. tore down West Power Station building in the early 1970s. The only remaining evidence of the plant are the gates which once controlled the flow of water from the Augusta Canal to the company's turbines.

#### **FOOTNOTES**

- 1. Albert M. Langley, Jr. and Mary L. Langley, <u>Trolleys in the Valley</u>
  ( ), p. 1. Hereafter referred to as Langleys, <u>Trolleys</u>.
- 2. "Editorial Correspondence Part II Augusta, Ga.", <u>The Street</u>
  Railway Journal 10 (March, 1894), p. 177. Hereafter referred to as
  "Augusta" <u>Street Rwy. Journal</u>.
- 3. Augusta Chronicle, June 24, 1890, p. 5.
- 4. Langleys, Trolleys, p. 1.
- 5. According to "List of Water Powers Granted on First Level, Augusta Canal", the A&A Railway West Plant was granted 300 hp in 1888. Increases in the power grant occurred in April 1890, October 1891, January 1892, January 1893 and April 1899. The list hangs on a wall in the office of Sonny Anderson, Maintenance Division, Steam Plant, Sibley Mill, Augusta, Georgía.
- 6. Other structures at the site in 1894 included car houses, 90 x 120 feet, and repair shops, 50 x 100 feet. "Augusta", Street Rwy. Journal, p. 177.
- 7. "Augusta", Street Rwy. Journal, p. 177-78. The Industrial Advantages of Augusta, Georgia, in 1893, listed the company's waterpower at 750 hp and the steam power, from several engines, at 900 hp. Overall, the company ran 9 dynamos, four of which were railway generators. The rest were part of the electric light plant of the associated Augusta Electric Light and Motor Company. Augusta Exchange Club, compiler, The Industrial Advantages of Augusta, Ga. The water wheels had hand governors. An attendant constantly stood at the valve wheel to adjust the water flow and thus the generation of electricity, based on readings from a voltmeter and speed recorder. "Augusta", Street Rwy. Journal, p. 177.
- 8. Langleys, Trolleys, p. 1.
- 9. Langleys, <u>Trolleys</u>, p. 2. In 1911, J. G. White Engineering Corporation, 43 Exchange Place, New York City, New York, which built the Stevens Creek Hydro-Electric Plant, on the Savannah River, 8 miles from Augusta, owned the A&A Railway. T. J. Hamilton, "The Georgia-Carolina Fair for 1911", <u>The Augustan</u> 1 (Augusta 1911) p. 7.
- 10. Langleys, Trolleys, p. 2.

- 11. Phone conversation with F. A. Saxon, 1 September 1977.
- 12. Phone conversation with F. A. Saxon, 1 September 1977.

#### BIBLIOGRAPHY

### Books

Augusta Exchange Club, compiler, The Industrial Advantages of Augusta, Georgia, August 1893, pp. 39-40 discusses the Augusta Railway Company and Augusta Electric Light and Motor Company.

Bagby, W. H., Reminiscences of the Old Street Car Days of the Yesterdays, 1899 to 1933, undated, Memories.

Langley, Albert and Vera, <u>Trolleys in the Valley</u>. History by trolley buffs.

# Newspaper

Augusta Chronicle, 1890.

Articles concerning inauguration of company's electric railway service.

### Periodical Articles

"Editorial Correspondence - Part II - Augusta, Ga.," The Street Railway Journal 10 (March 1894) pp 176-178.

Description of power plant equipment and arrangement.

# Telephone Interview

With F. A. Saxon, 1 September 1977. Mr. Saxon began to work at the A&A Railway and Electric Co. in 1923, was a Division Engineer, and retired from Georgia Power in 1967. He provided information on power plant equipment and on the termination of the operation at the West Power Station.